

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

|  |   |   |
|--|---|---|
| Applicant's or agent's file reference<br><b>PHUS030263WO</b>   | <b>FOR FURTHER ACTION</b>   | See item 4 below  |
| International application No.<br><b>PCT/IB2004/051381</b>  | International filing date ( <i>day/month/year</i> )<br><b>03 August 2004 (03.08.2004)</b> | Priority date ( <i>day/month/year</i> )<br><b>05 August 2003 (05.08.2003)</b> |
| International Patent Classification (8th edition unless older edition indicated)<br>See relevant information in Form PCT/ISA/237 |   |   |
| Applicant<br><b>KONINKLIJKE PHILIPS ELECTRONICS, N.V.</b>  |   |   |

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input checked="" type="checkbox"/> | Box No. II   | Priority  |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application  |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

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|---|---|
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland<br><br>Facsimile No. +41 22 740 14 35 | Date of issuance of this report<br><b>06 February 2006 (06.02.2006)</b><br><br>Authorized officer<br><br><div style="text-align: center; font-weight: bold; font-size: 1.2em;">Idhir Britel</div><br><br>Telephone No. +41 22 338 70 60 |
|---|---|

# PATENT COOPERATION TREATY

REC'D 21 OCT 2004

WIPO

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From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/IB2004/051381

International filing date (day/month/year)  
03.08.2004

Priority date (day/month/year)  
05.08.2003

International Patent Classification (IPC) or both national classification and IPC  
H05B41/28

Applicant  
KONINKLIJKE PHILIPS ELECTRONICS, N.V.

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IB2004/051381

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IB2004/051381

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**Box No. II Priority**

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1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

|                               |             |      |
|-------------------------------|-------------|------|
| Novelty (N)                   | Yes: Claims |      |
|                               | No: Claims  | 1-18 |
| Inventive step (IS)           | Yes: Claims |      |
|                               | No: Claims  | 1-18 |
| Industrial applicability (IA) | Yes: Claims | 1-18 |
|                               | No: Claims  |      |

2. Citations and explanations

**see separate sheet**

**Re Item V.**

- 1 The following documents are referred to in this communication:  
D1: US-A-4 251 752 (STOLZ JAMES B) 17 February 1981 (1981-02-17)
- 2 Although claim 1 has been drafted as an independent claim, it includes all the features of independent claim 11, therefore claim 1 should be drafted as dependent on claim 11 according to Rule 6 paragraph 6.4 PCT. Likewise claim 11 and claim 17 include all the features of independent claim 18, therefore they should also be drafted as dependent on claim 18.  
The aforementioned claims as a whole lack conciseness and clarity, and therefore do not meet the requirements of Article 6 PCT.
- 3 In view of the excessive number of claims drafted as independent claims, only one claim will be analysed with respect to novelty and inventive step. Claim 11 appears to be the least unclear of all "independent" claims and will for this reason be analysed. Claim 11 is nevertheless unclear for the following reasons:
  - 3.1 It can not be determined from the description and from the drawings to what a "power factor correction integrated circuit" refers to, and it's relation with the "power factor correction input stage". In particular, it is unclear whether an integrated circuit controlling a switch in the input stage is meant, or whether the power factor correction stage is integrated in an ASIC of some sort.
  - 3.2 The expression "a function of a load being applied by to said power factor correction integrated circuit" is technically unclear as "by" and "to" have very distinct technical meanings.
- 4 An opinion on the novelty/inventiveness has been based on the following hypothesis relating to the unclear subject-matter in question:
  - 4.1 There is a power factor correction circuit with a dedicated integrated circuit for power factor correction.
  - 4.2 The clamping voltage of the line voltage sensing circuit should decrease, as the output current supplied to the load by the power factor correction circuit decreases.

**5 INDEPENDENT CLAIM 11**

Furthermore, the above-mentioned lack of clarity and conciseness notwithstanding, the subject-matter of claim 11 is not new in the sense of Article 33(2) PCT, and therefore the criteria of Article 33(1) PCT are not met.

Document D1 discloses a power factor correction input stage comprising (the references in parenthesis applying to this document):

- a boost switching power supply (L1, Q1, CR5) (D1: Fig. 2; col. 4, lines 16-25);
- control means to render the input current proportional to a voltage (IC1a, IC1b, Q2) (D1: Fig. 2, col. 6, lines 14-47);
- an input voltage divider circuit (R44, R8) connected to said control means (IC1a) (D1: Fig. 2; col. 6, lines 48-58);
- said line voltage sensing circuit has inputs derived from the load (R6) and the line voltage (R44, R8) (D1: Fig. 2; col. 7, lines 50-60).

- 5.1 The term "clamping" in the present application refers to limiting the input current demand to the power factor correction circuit; In D1 "clamping", as defined in the present application, is achieved by using a voltage divider.
- 5.2 Taking into consideration the hypothesis stated under points 4.1 and 4.2 in the interpretation of claim 11, D1 fully anticipates the features of the claimed subject-matter.
- 6 Since the subject-matter of each of independent claims 1, 17, 18 corresponds to the subject matter of claim 11, the same reasoning as given for claim 11 will apply mutatis mutandis to said claims.

Therefore claims 1, 17, 18 also do not meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).

**7 DEPENDENT CLAIM 3**

In D1, a dimmable ballast for fluorescent lamps in electrical communication with a power factor correction input stage is disclosed. The dimming control line (3) is connected to the dimmable ballast and the power factor correction circuit (see Fig.

2). This signal is indicative of the load current being drawn by said ballast.

Therefore the subject-matter of dependent claim 3 is not new in the sense of Article 33(2)PCT.

**8 DEPENDENT CLAIM 4**

In D1, a dimmable ballast for fluorescent lamps in electrical communication with a power factor correction input stage is disclosed. A load feedback signal (R6) indicative of the load current being drawn by said ballast is connected to said power factor correction input stage (D1: Fig.2).

Therefore the subject-matter of dependent claim 4 is not new in the sense of Article 33(2)PCT.

**8 DEPENDENT CLAIMS 2,5-10,12-16**

Dependent claims 2,5-10,12-16 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).